



Original Article

Designing Teaching Materials Based on Students' Book to Improve Students' Reading Skill in the Merdeka Curriculum

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Abstract:

This research aimed at (i) designing effective teaching materials based on students' book to support the Merdeka Curriculum; (ii) assessing the validity level of the designed teaching materials; and (iii) determining the effectiveness of the materials in improving third-grade students' reading skill. This research employed a combination of qualitative and quantitative methods. The ADDIE model was employed, focusing on the analysis, design, development, and implementation stages. The research subjects were 21 third-grade students of SDN 1 Tamanbali. Data were collected through observation, interviews, questionnaires, and pre-test and post-test instruments. The qualitative data were analyzed using coding and thematic analysis, while the quantitative data were analyzed using descriptive statistics and the Wilcoxon test. The results showed that the existing student book lacked sufficient content and engagement to support reading skill development. Based on the needs analysis, the researcher developed teaching materials entitled My First English Reading Journey, Consisting of three units with reading texts, vocabulary, illustrations, and comprehension tasks. Expert validation confirmed the materials were valid in terms of content, language, and media design. Implementation of the materials led to a significant improvement in students' reading skills, as indicated by increased post-test scores and positive feedback from students and the teacher. It was concluded that well-designed student book-based teaching materials can effectively enhance reading skills and support the implementation of the Merdeka Curriculum in primary schools.

Keywords: ADDIE Model, Elementary School, Merdeka Curriculum, Reading Skill, Teaching Materials.

Introduction

Reading is one of the essential skills in language acquisition and plays a pivotal role in supporting the learning of all school subjects. It enables students to comprehend, analyze, and evaluate information across disciplines, forming the foundation of academic achievement. However, the reading skills of Indonesian elementary school students remain a significant concern. According to the 2018 PISA survey, Indonesia ranked among the bottom two countries in terms of reading literacy out of 61 countries ([Wotsa](#)



<https://jurnal.usk.ac.id/riwayat>

[& Yadav, 2023](#)). This alarming statistic reflects a lack of a strong reading culture and insufficient reading comprehension among students. Moreover, observation in elementary schools reveals that many students can read texts aloud but struggle to grasp their meaning, indicating limited reading comprehension abilities ([Dewi et al., 2024](#)).

One contributing factor to this issue is the absence of engaging and level-appropriate teaching materials. Student books often fail to present meaningful, contextual, and stimulating content that fosters reading skills. In response to these challenges, the Indonesian government has implemented the Merdeka Curriculum, which emphasizes essential content, student independence, and character development (Permendikbudristek No. 7, 2022). Under this curriculum, English has become a compulsory subject in primary education. Teachers are encouraged to be more creative and responsive in designing teaching materials that align with students' cognitive levels and interests.

Teaching materials are defined as instructional resources that support the learning process, and their design should reflect learners' needs, development stage, and educational goals. Effective teaching materials are those that are not only accurate in content but also engaging and motivating, helping students gradually build up their skills ([Tomlinson, 2023](#)). The ADDIE model (Analysis, Design, Development, Implementation, and Evaluation) is commonly used as a framework in instructional design, offering a structured method for developing high-quality educational materials ([Molenda, 2003](#)).

Several studies have highlighted the importance of material design in improving reading comprehension. [Dewi et al \(2020\)](#), demonstrated the effectiveness of literature-based materials in sixth-grade classrooms, [Rofi'i & Susilo \(2023\)](#) emphasized the role of mobile learning in enhancing English instruction. [Lena et al \(2019\)](#) and [Amini et al \(2019\)](#) also confirmed that tailored teaching materials can significantly enhance student engagement and achievement. However, few studies have explicitly focused on designing teaching materials based on student books within the framework of the Merdeka Curriculum, especially in lower-grade elementary contexts.

Therefore, this research aims to design teaching materials based on student books to improve the reading skill of third-grade elementary students, using the ADDIE model. The purpose of this study is threefold: (1) to design engaging and curriculum-aligned teaching materials, (2) to evaluate their validity through expert review, and (3) to assess their effectiveness in improving students' reading abilities. The novelty of this study lies in its integration of existing student book commonly used but under optimized as a foundation for developing effective reading focused teaching materials specifically aligned with the goals of the Merdeka Curriculum.

Methods

This study employed a research and development (R&D) design guided by the ADDIE model, which consists of five stage: Analysis, Design, Development, Implementation, and Evaluation ([Aldoobie, 2015](#)). The development process, however, was carried out only up to the implementation stage.

The research was conducted at SDN 1 Tamanbali, Bangli Regency, involving 21 third-grade students as the primary subjects. The selection of this group was based on their developmental stage, where reading skills are still forming and require significant reinforcement. This school was also chosen because it implements the Merdeka Curriculum, making it relevant to the objective of the study.

The purpose of the research was to design teaching materials based on student book to improve reading skills in accordance with the Merdeka Curriculum. The ADDIE model guided the systematic process, ensuring that the materials were aligned with curriculum standards and students' needs. Analysis focused on identifying students' reading needs and challenges, reviewing the existing student book, and mapping competencies specified in the Merdeka Curriculum. Design involved structuring the teaching materials, defining objectives, planning activities, and creating assessment tools. Development included compiling texts, integrating illustrations, and preparing exercises for vocabulary building and comprehension. Implementation tested the developed materials in the classroom and collected feedback from teacher and students.

Data were gathered using multiple techniques to ensure comprehensive analysis: Observation was conducted to record student engagement, behavior, and responses during reading activities, using an observation checklist and field notes. Interview with the English teacher provided qualitative insights into the suitability and effectiveness of the developed materials. Questionnaires were distributed to students and teachers to obtain both quantitative and qualitative feedback on the clarity, attractiveness, and usefulness of the teaching materials. Test in the form of pre-test and post-test measured students' reading performance before and after the implementation of the materials, focusing on reading comprehension, vocabulary recognition, and fluency.

The collected data were analyzed using qualitative and quantitative methods: Qualitative analysis was applied to interpret observational data, interview transcripts, and open-ended responses in the questionnaires, identifying patterns in student engagement and perceptions. Quantitative analysis involved statistical comparison of pre-test and post-test score to evaluate the effectiveness of teaching materials. Descriptive statistics such as mean, standard deviations, and percentages summarized the performance improvements. A non-parametric Wilcoxon test was used to determine the significance of the difference between pre-test and post-test score, given that the post-test data did not meet normality assumptions.

Results

Sub 1 Designing Effective Teaching Materials

The needs analysis revealed that the existing student book lacked sufficient content to develop reading skills effectively. Therefore, the researcher designed teaching materials titled "*My First English Reading Journey*" consisting of three units: School rooms, prepositions of place, and common verbs. Each unit included reading texts, vocabulary enrichment, visual illustrations, and comprehension exercises to encourage active learning and engagement (Tomlinson, 2023). This approach aligns with the principles of the Merdeka Curriculum, which emphasizes learner-centered and competency-based instruction.

Sub 2 Validity of Teaching Materials

Expert validation was conducted by two specialists: one in content and language, and one in media design. Table 1 shows the evaluation by the content and language expert.

Table 1. Validation by Content and Language Expert

Aspect	Score	Category
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Curriculum Fit	4	Very Good
Depth of Material	4	Very Good
Clarity of Learning Objectives	4	Very Good
Grammar and Language Appeal	3	Good

Overall, the materials achieved a “Very Good” category, particularly in curriculum alignment, clarity, and organization. However, improvements were suggested in grammar refinement and the addition of more engaging language elements.

Media validation (Table 2) indicated that the layout, typography, and color selection were appropriate for elementary students. However, suggestions were made to balance the image-text proportions and enhance the relevance of the illustrations.

Table 2. Validation by Media Expert

Aspect	Score	Category
Typeface and Readability	4	Very Good
Illustration Relevance	3	Good
Student Motivation and Engagement	4	Very Good

These findings indicate that the teaching materials were valid and feasible for implementation after minor revisions.

Sub 3 Effectiveness of Teaching Materials

The effectiveness was measured using pre-test and post-test scores, student and teacher questionnaires, and observation checklists. Table 3 presents the descriptive analysis of test results.

Table 3. Descriptive Analysis of Pre-test and Post-test Result

Variable	N	Minimum	Maximum	Mean	Std Deviaton
Pre-test	21	24	96	63.90	22.291
Post-test	21	77	100	93.67	6.232

The Wilcoxon test revealed a significance value of 0.000 (<0.05), indicating a significant difference between pre-test and post-test scores. This suggests that the teaching materials were highly effective in improving students' reading abilities. These results support [Perfetti's \(2015\)](#) the argument that well-designed instructional materials can enhance reading comprehension and fluency.

Questionnaire results showed that 71% of students strongly agreed that the materials were interesting and easy to use, while 100% of teachers agreed that the materials aligned with the Merdeka Curriculum and improved students' reading skills. Observations confirmed increased student engagement, motivation, and vocabulary mastery during classroom activities.

The findings indicate that the teaching materials effectively support the development of reading comprehension, vocabulary acquisition, and reading fluency. The inclusion of contextualized reading texts, vocabulary exercises, and colorful illustrations contributed to increased student motivation and engagement, aligning with [Tomlinson's \(2023\)](#) principles of effective material design.

These results are consistent with studies by [Rofi'i & Susilo \(2023\)](#), which

emphasize that student-centered materials integrated with visual and interactive elements can significantly improve learning outcomes. Furthermore, this study demonstrates that well-designed materials based on existing student books can provide practical, accessible solutions for teachers to implement the Merdeka Curriculum effectively.

Conclusion

The development of *My First English Reading Journey* as teaching materials was successfully conducted through the stages of analysis, design, development, and implementation using the ADDIE model. The materials were adapted from an existing student's book and aligned with the Merdeka Curriculum to address the reading needs of third-grade students. Expert validation confirmed that the materials met high-quality standards, with well-structured content, clear learning objectives, and engaging exercises supported by meaningful illustrations.

The implementation result demonstrated significant improvements in students' reading skills, vocabulary acquisition, and fluency, as reflected in post-test outcomes and positive feedback from both the teacher and students. These findings indicate that the teaching materials effectively promote active learning, motivation, and independent reading. Overall, the study proves that well-designed student book-based teaching materials can enhance literacy development and support the key objectives of the Merdeka Curriculum.

Suggestion

The teaching materials developed in this research can be applied as an effective resource to improve students' reading skills and engagement in line with the Merdeka Curriculum. Since the materials have been validated and proven effective, teachers are encouraged to integrate them into the classroom reading activities to reinforce comprehension, vocabulary, and motivation. Future studies may focus on expanding the scope of these materials with additional units or different reading themes to further enhance students' literacy growth and provide broader insights into their long-term effectiveness.

References

- Aldoobie, N. (2015). ADDIE Model. *American International Journal of Contemporary Research*, 5(6).
- Amini, R., Lena, S. M., & Helsa, Y. (2019). *Development of Integrated Thematic Teaching Materials using Problem-Based Learning Model in Elementary School*. 382(Icet), 442–445.
- Dewi, N. P. A., Kertiasih, P., & Artini, L. P. (2020). Designing literature-based instruction materials for sixth grade students of elementary school. *Jurnal Ilmiah Sekolah Dasar*, 4(4), 630–635.
- Dewi, N. P. A., Suryantini, N. M. D., & Sintadewi, N. M. D. (2024). Assessment Tool of Portfolios: Enhancing Primary School Students' English Reading Proficiency. *Jiip - Jurnal Ilmiah Ilmu Pendidikan*, 7(7), 7666–7670. <https://doi.org/10.54371/jiip.v7i7.5653>
- Lena, M. S., Netriwati, N., & Suryanita, I. (2019). Development of teaching materials of elementary school student with a scientific approach characterized by ethnomathematics. *Journal of Physics: Conference Series*, 1318(1). <https://doi.org/10.1088/1742-6596/1318/1/012060>
- Molenda, M. (2003). The ADDIE model. *Encyclopedia of Educational Technology*,

- ABC-CLIO*, 20, 2005. http://www.indiana.edu/~molpage/The_ADDIE_Model_Encyclo.pdf
- Rofi'i, A., & Susilo, S. V. (2023). The Development of Teaching Materials Based on Mobile Learning in English Learning for Elementary Schools. *AL-ISHLAH: Jurnal Pendidikan*, 15(2), 2062–2075. <https://doi.org/10.35445/alishlah.v15i2.2475>
- Skill, R., & Perfetti, C. A. (2015). *Continuities in Reading*. 11–21.
- Tomlinson, B. (2023). Introduction: principles and procedures of materials development. *Materials Development in Language Teaching*, 2011, 1–32. <https://doi.org/10.1017/9781139042789.002>
- Wotsa, H., & Yadav, S. (2023). Improving the English Reading Skills and Reading Strategies of Elementary School Students. *International Journal For Multidisciplinary Research*, 5(4), 1–6. <https://doi.org/10.36948/ijfmr.2023.v05i04.4456>